FIG. 1

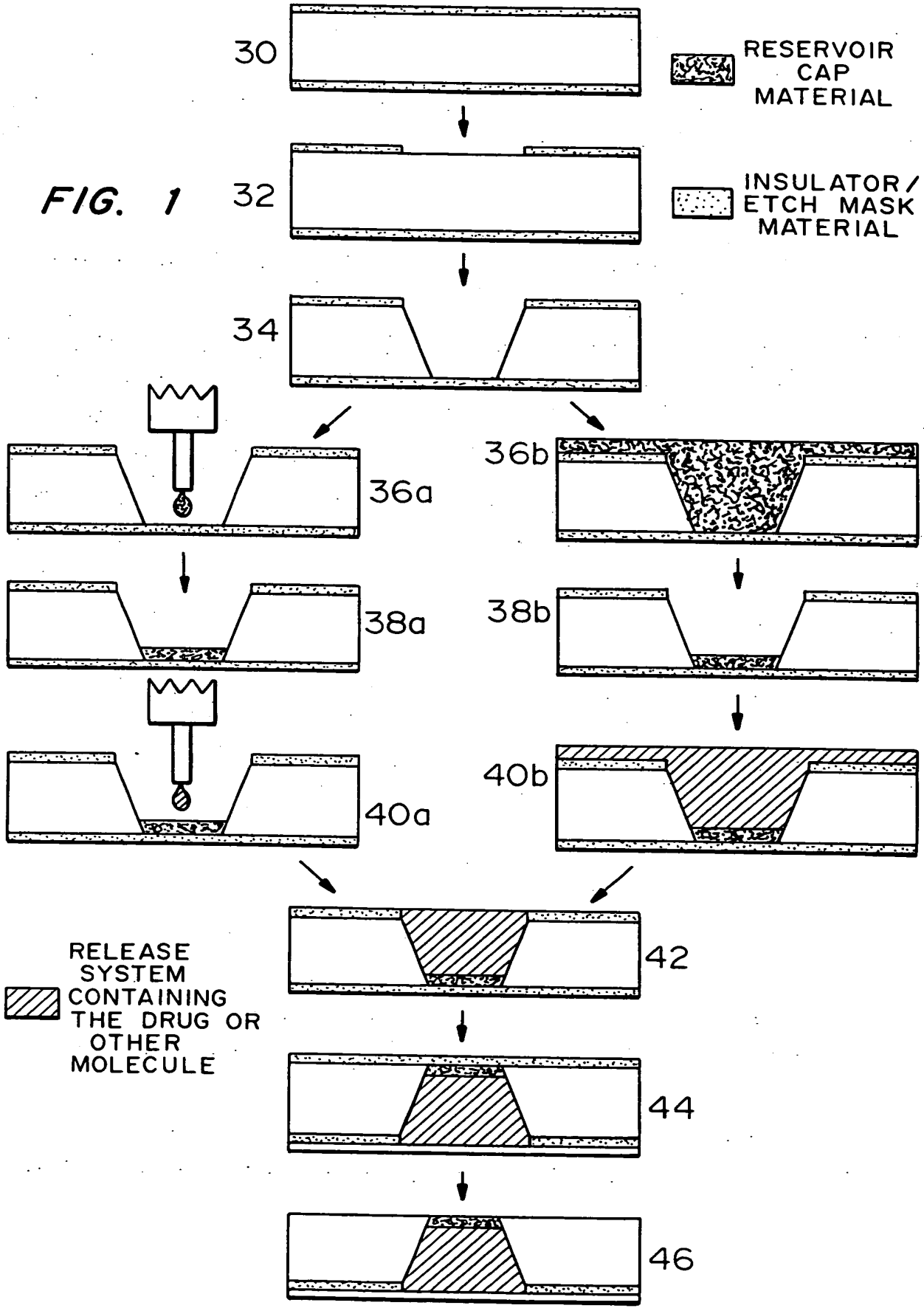
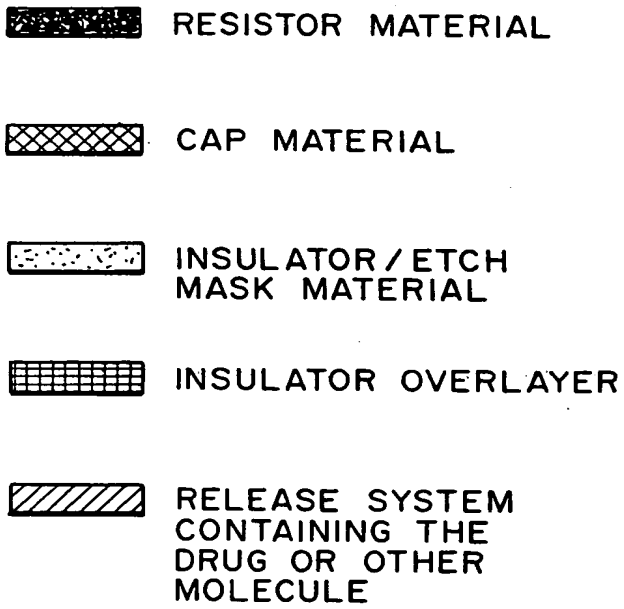

30
RESERVOIR CAP MATERIAL
32
INSULATOR/ ETCH MASK MATERIAL
34
36a
36b
38a
38b
40a
40b
42
44
46
RELEASE SYSTEM CONTAINING THE DRUG OR OTHER MOLECULE

FIG. 2a


RESISTOR MATERIAL
CAP MATERIAL
INSULATOR / ETCH MASK MATERIAL
INSULATOR OVERLAYER
RELEASE SYSTEM CONTAINING THE DRUG OR OTHER MOLECULE

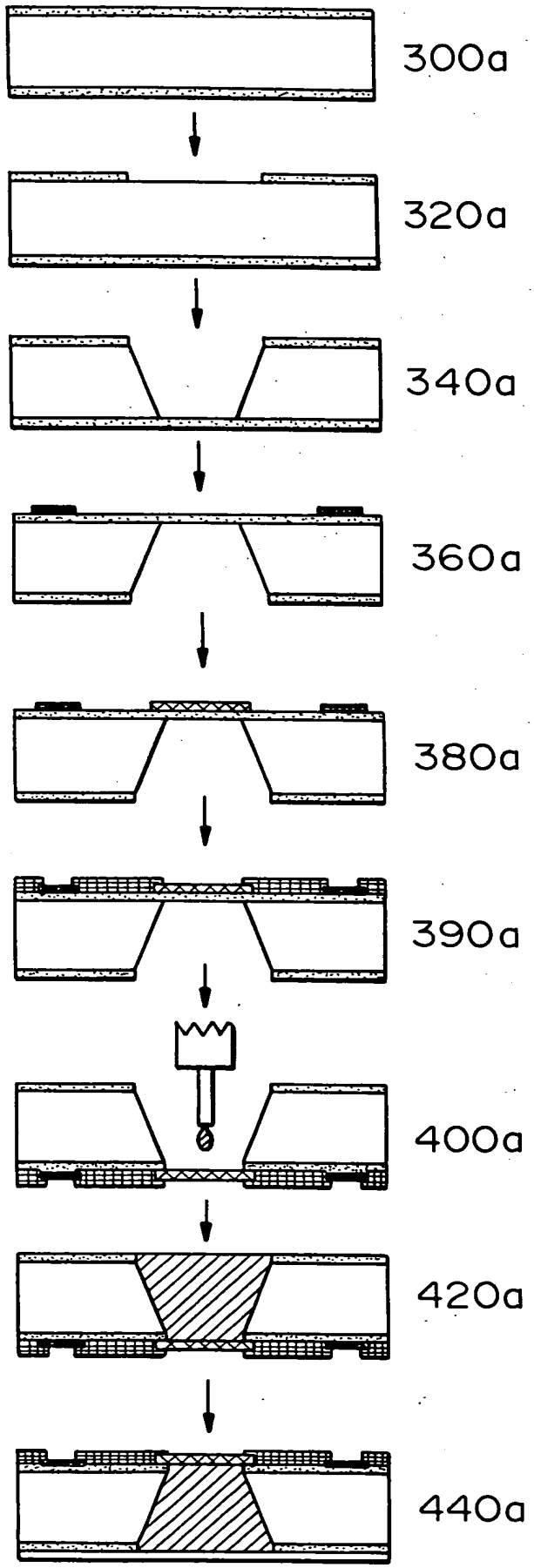

300a
320a
340a
360a
380a
390a
400a
420a
440a

FIG. 2B

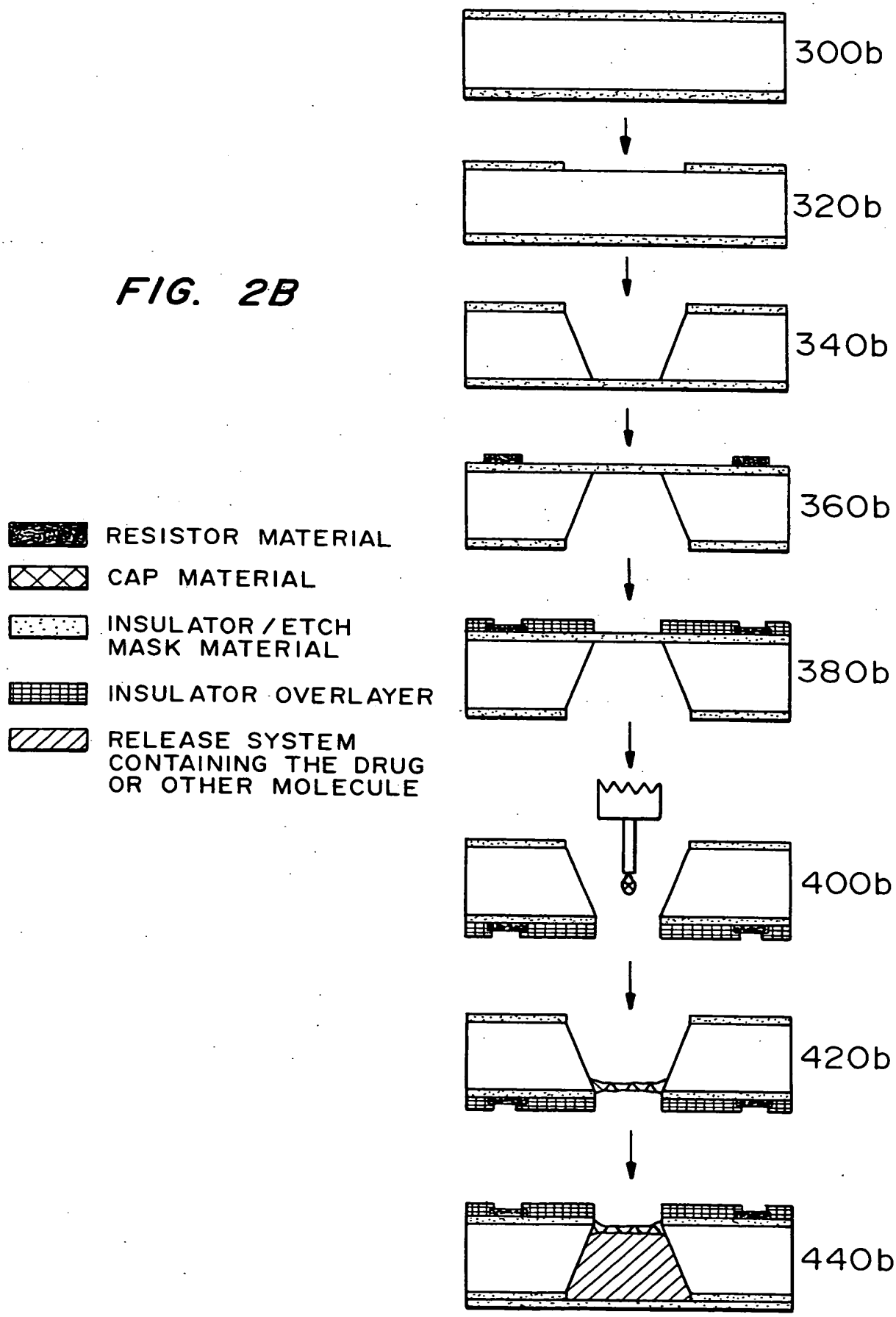

RESISTOR MATERIAL
CAP MATERIAL
INSULATOR / ETCH MASK MATERIAL
INSULATOR OVERLAYER
RELEASE SYSTEM CONTAINING THE DRUG OR OTHER MOLECULE
300b
320b
340b
360b
380b
400b
420b
440b

FIG. 2C

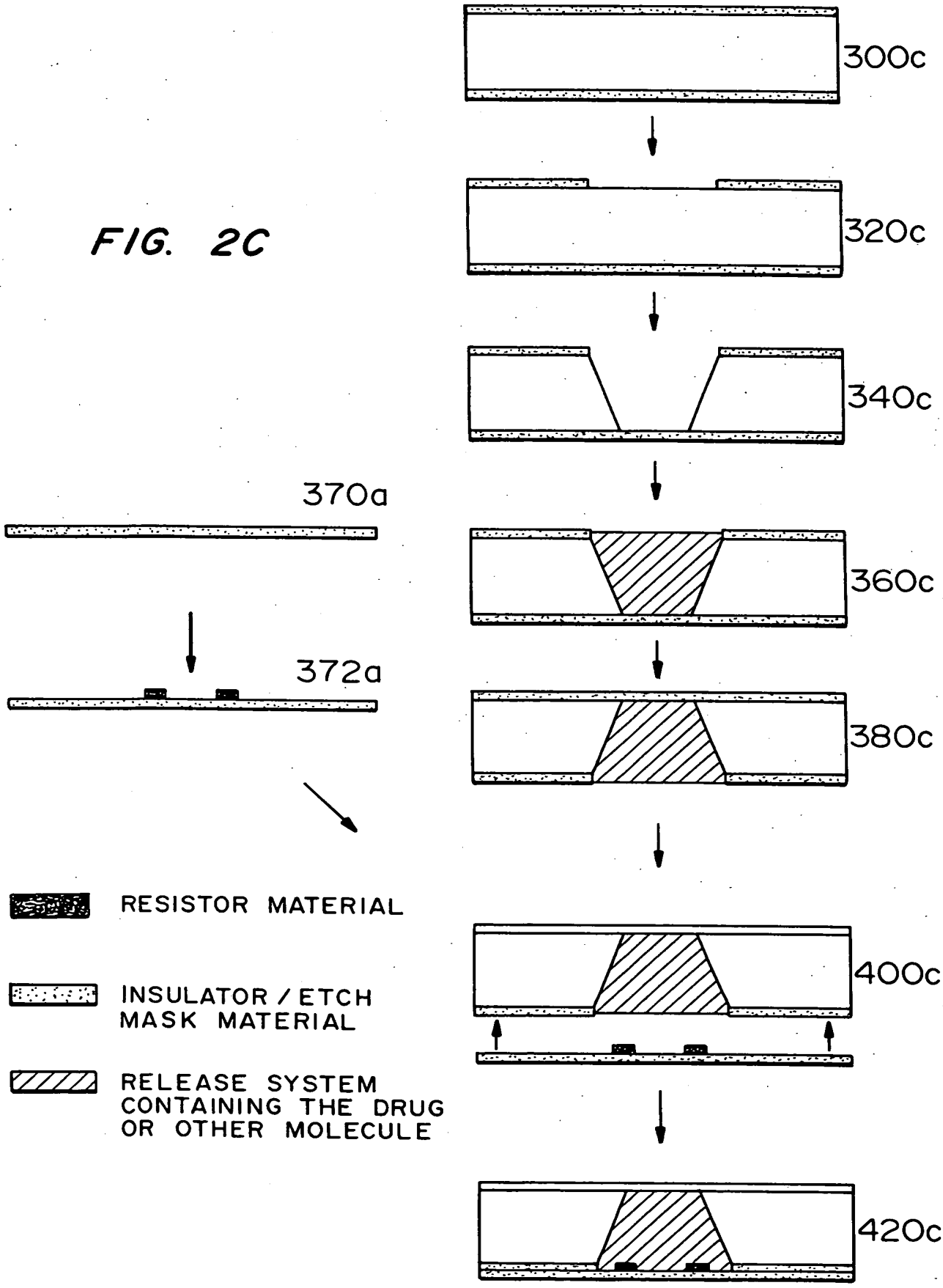
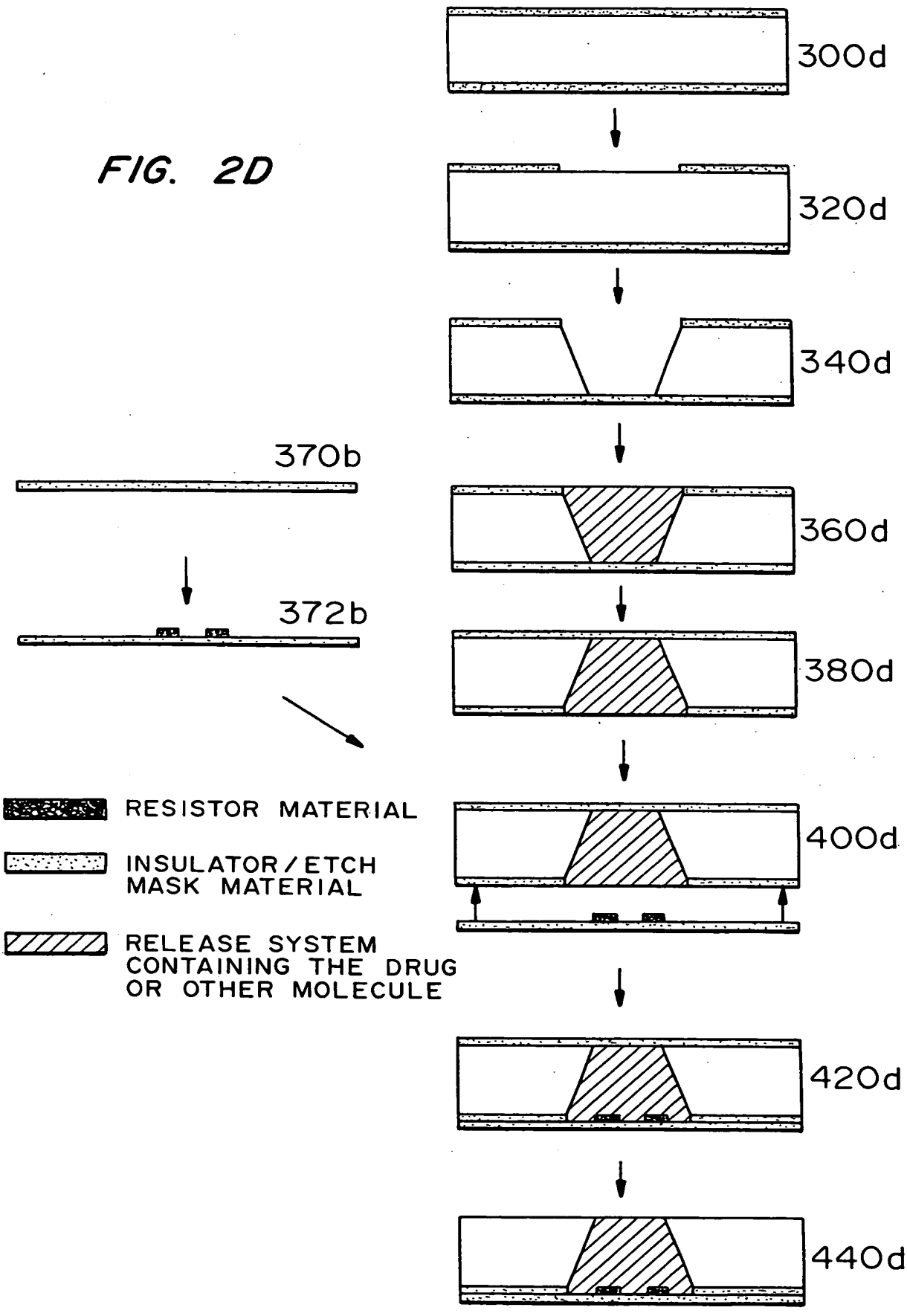

300c
320c
340c
370a
360c
372a
380c
RESISTOR MATERIAL
INSULATOR / ETCH MASK MATERIAL
RELEASE SYSTEM CONTAINING THE DRUG OR OTHER MOLECULE
400c
420c

FIG. 2D


300d
320d
340d
370b
360d
372b
380d
RESISTOR MATERIAL
INSULATOR/ETCH MASK MATERIAL
RELEASE SYSTEM CONTAINING THE DRUG OR OTHER MOLECULE
400d
420d
440d

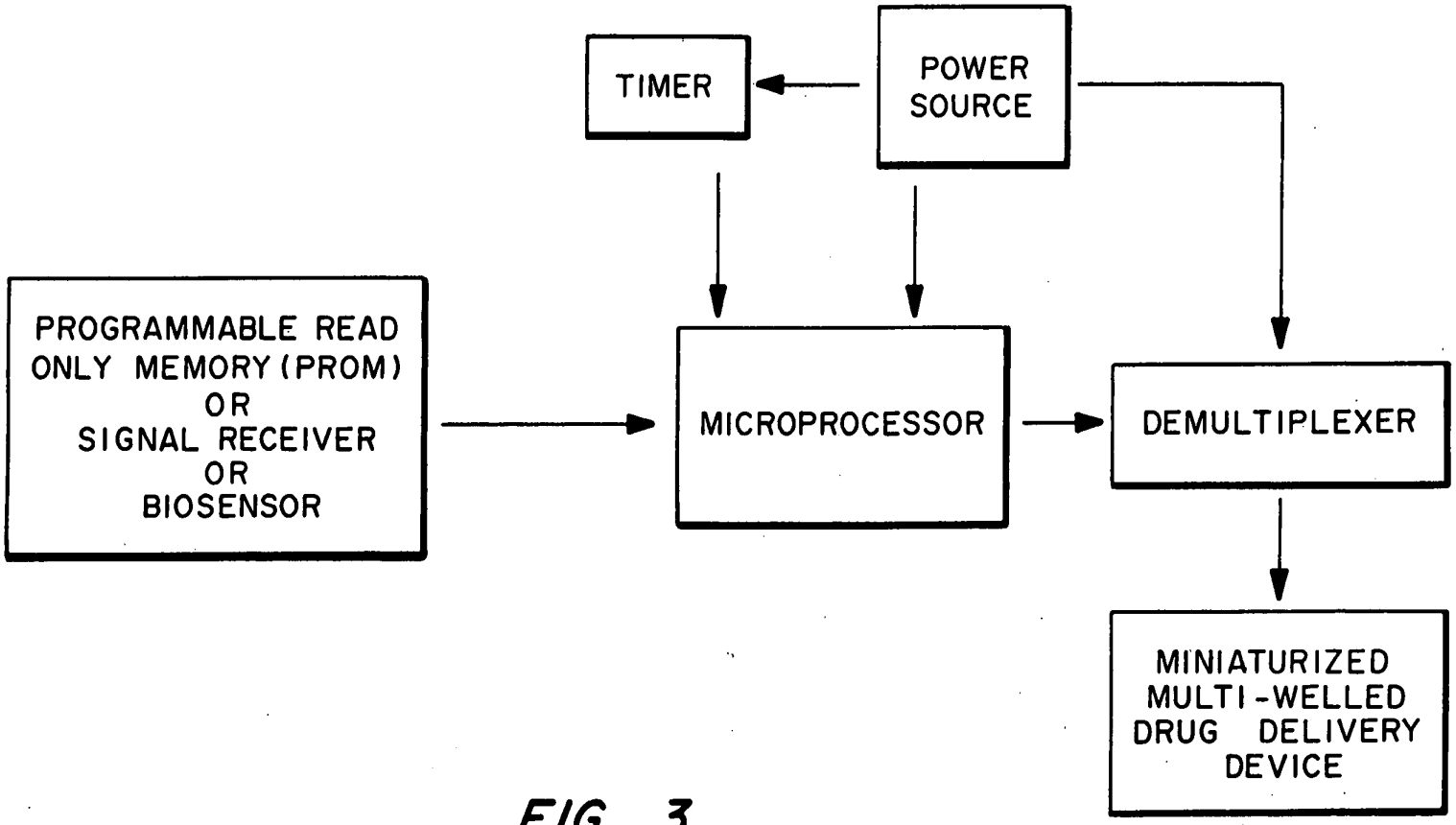
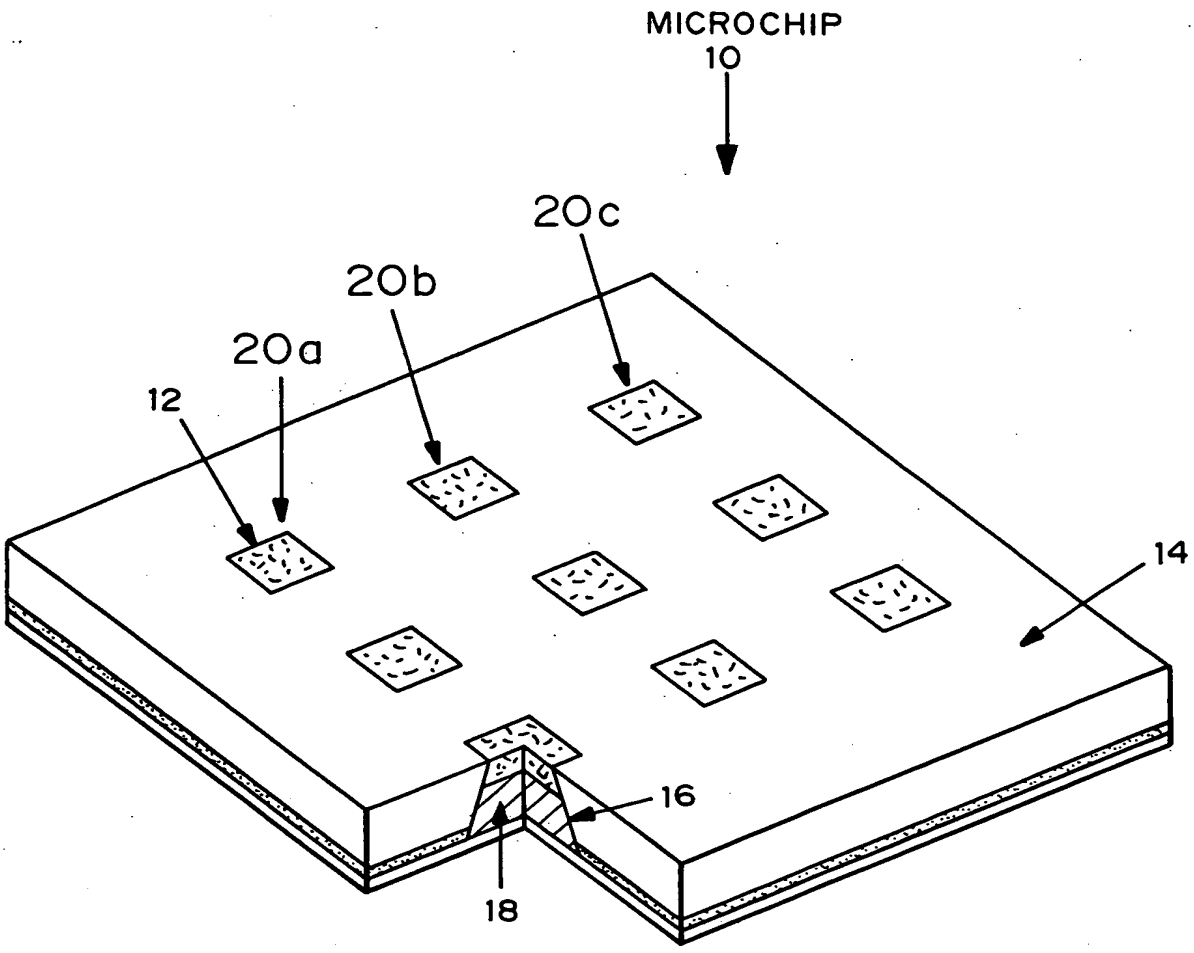

TIMER
POWER SOURCE
PROGRAMMABLE READ ONLY MEMORY (PROM) OR SIGNAL RECEIVER OR BIOSENSOR
MICROPROCESSOR
DEMULTIPLEXER
MINIATURIZED MULTI-WELLED DRUG DELIVERY DEVICE

FIG. 3



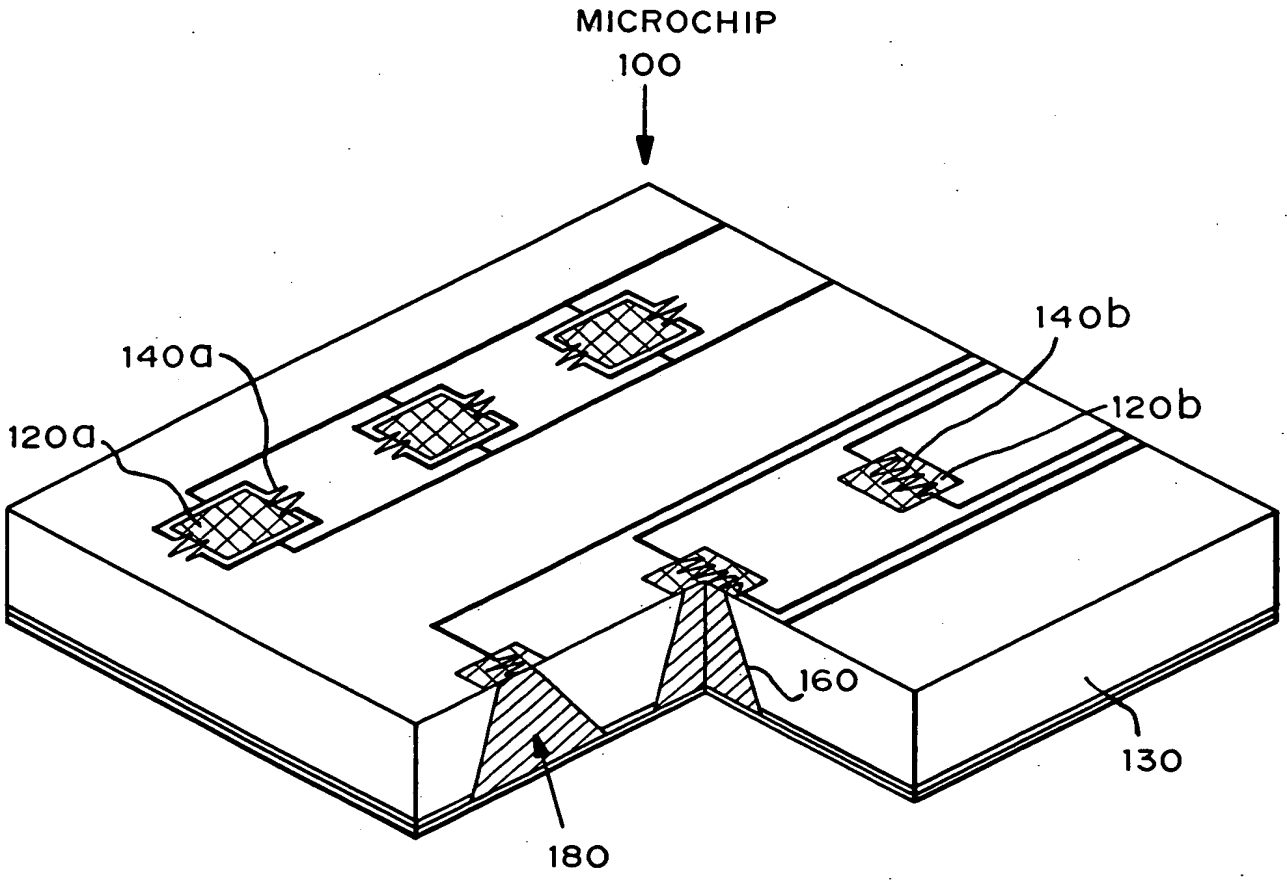
RELEASE SYSTEM CONTAINING THE DRUG OR OTHER MOLECULE

RESERVOIR CAP MATERIAL

INSULATOR/ETCH MASK MATERIAL

FIG. 4

FIG. 5



RESISTOR MATERIAL

CAP MATERIAL

INSULATOR / ETCH MASK MATERIAL

RELEASE SYSTEM CONTAINING THE DRUG OR OTHER MOLECULE

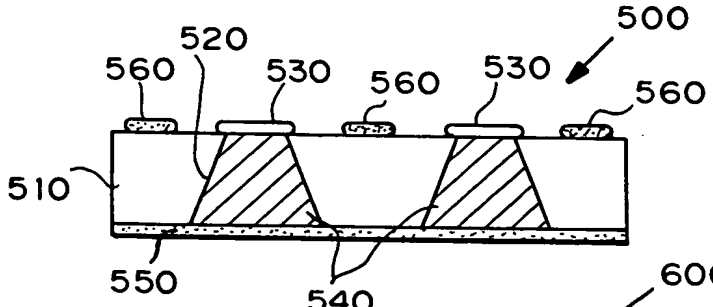


FIG. 6A

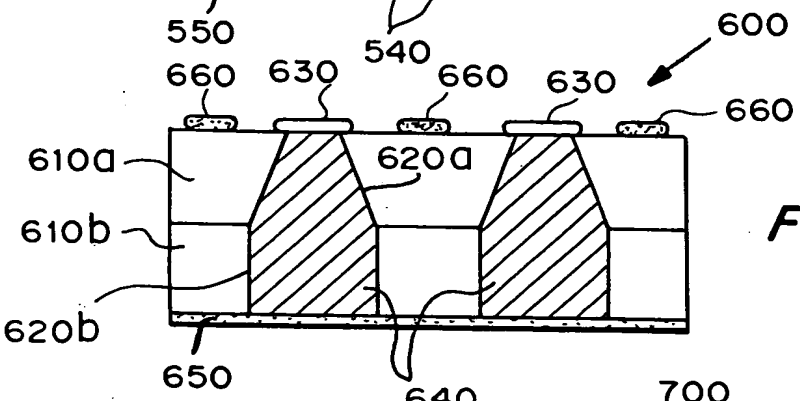


FIG. 6B

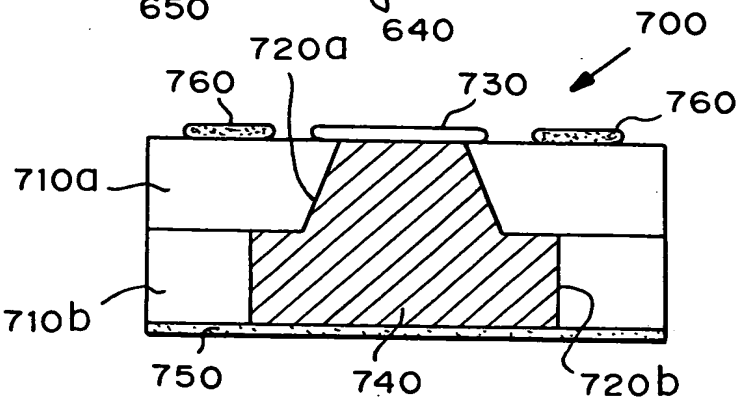


FIG. 6C

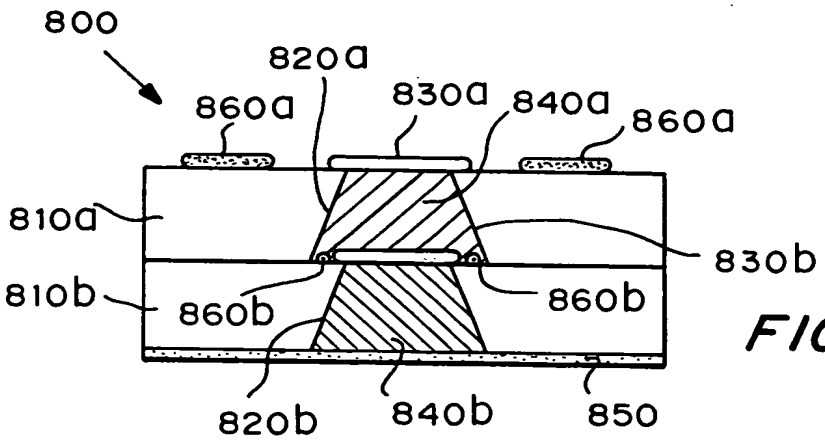


FIG. 6D

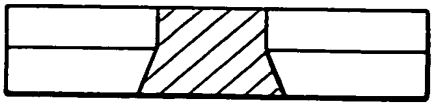


FIG. 6E

FIG. 7A

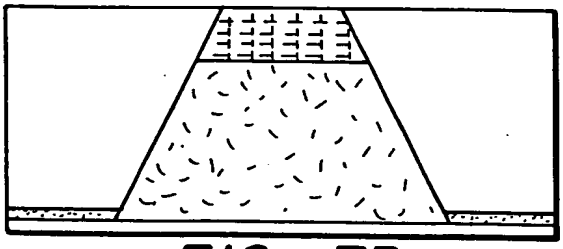


FIG. 7B

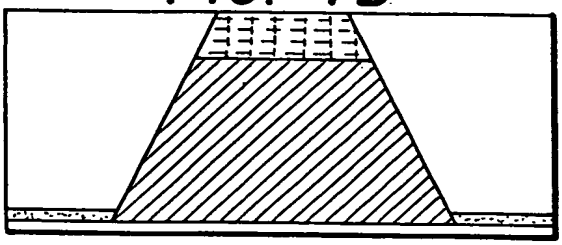


FIG. 7C

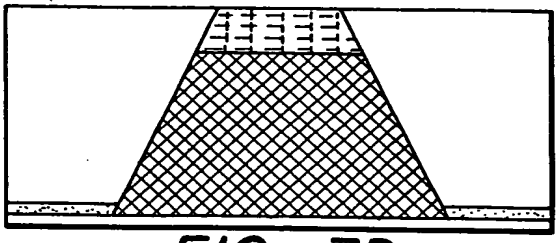


FIG. 7D

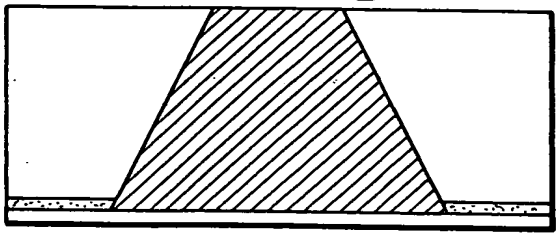


FIG. 7E

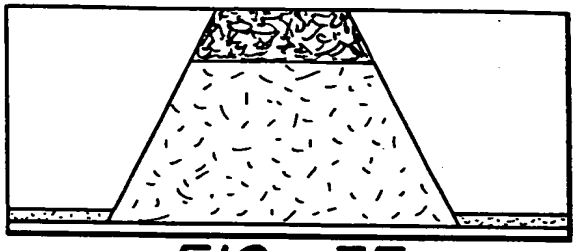


FIG. 7F

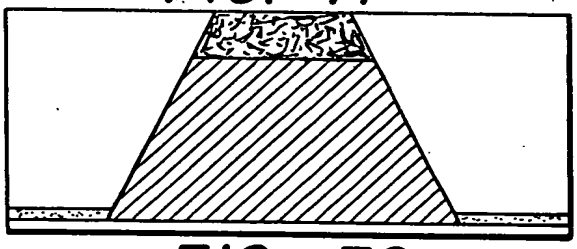


FIG. 7G

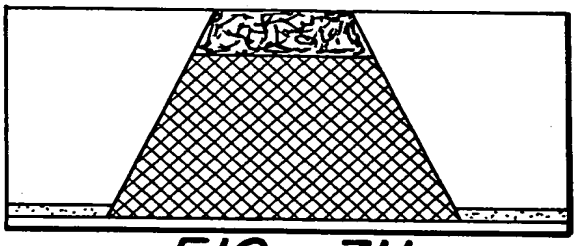


FIG. 7H

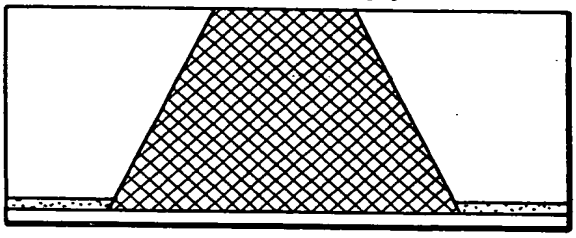
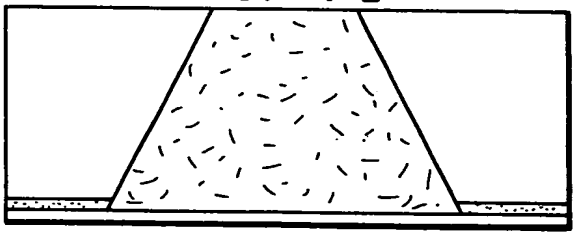
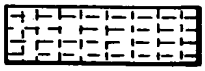


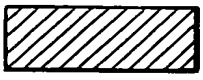
FIG. 7I



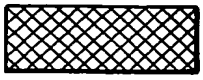


DEGRADABLE RESERVOIR CAP MATERIAL

NON-DEGRADABLE RESERVOIR-CAP MATERIAL



DEGRADABLE RELEASE SYSTEM



NON-DEGRADABLE RELEASE SYSTEM

PURE DRUG OR OTHER MOLECULE (SOLID, LIQUID, OR GEL FORM)

INSULATOR/ETCH MASK MATERIAL

FIG. 8A

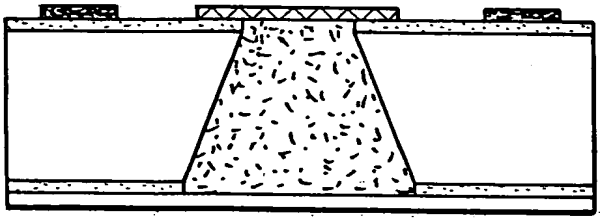


FIG. 8B

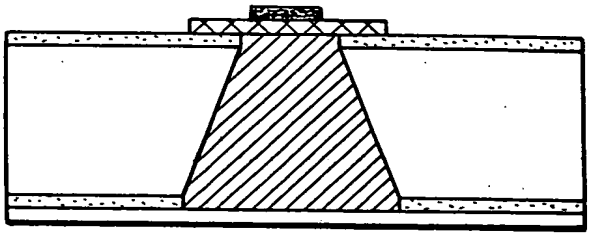


FIG. 8C

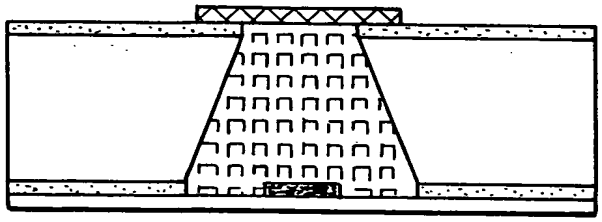
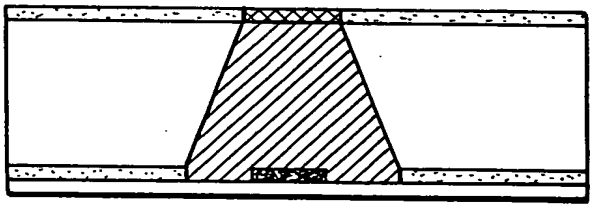
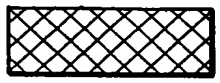


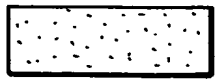
FIG. 8D



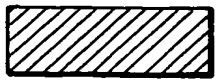
RESISTOR



CAP MATERIAL



INSULATOR / ETCH MASK MATERIAL



DEGRADABLE RELEASE SYSTEM

NON-DEGRADABLE RELEASE SYSTEM

PURE DRUG OR OTHER MOLECULE
(SOLID, LIQUID OR GEL FORM)

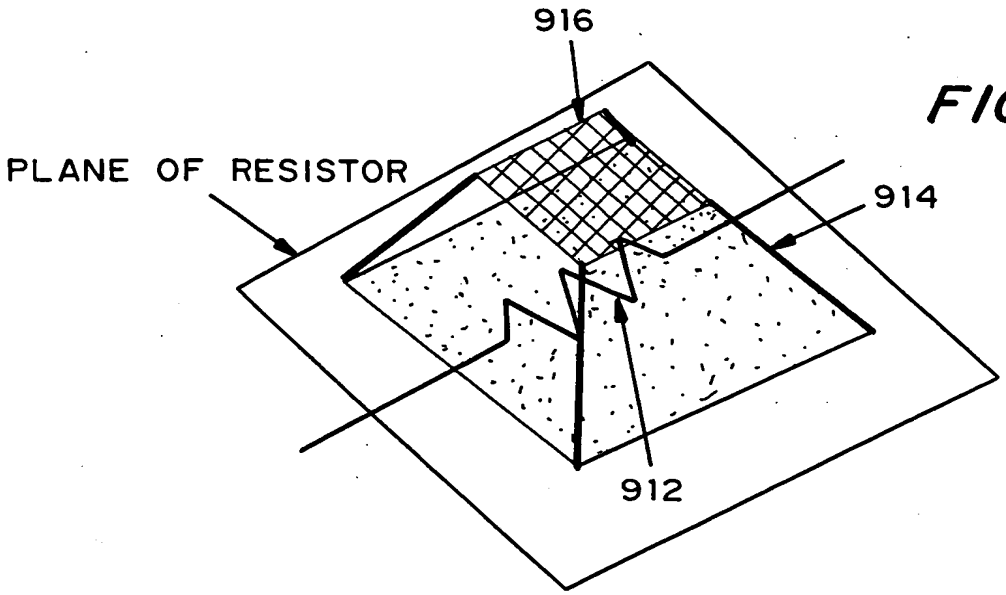


FIG. 9A

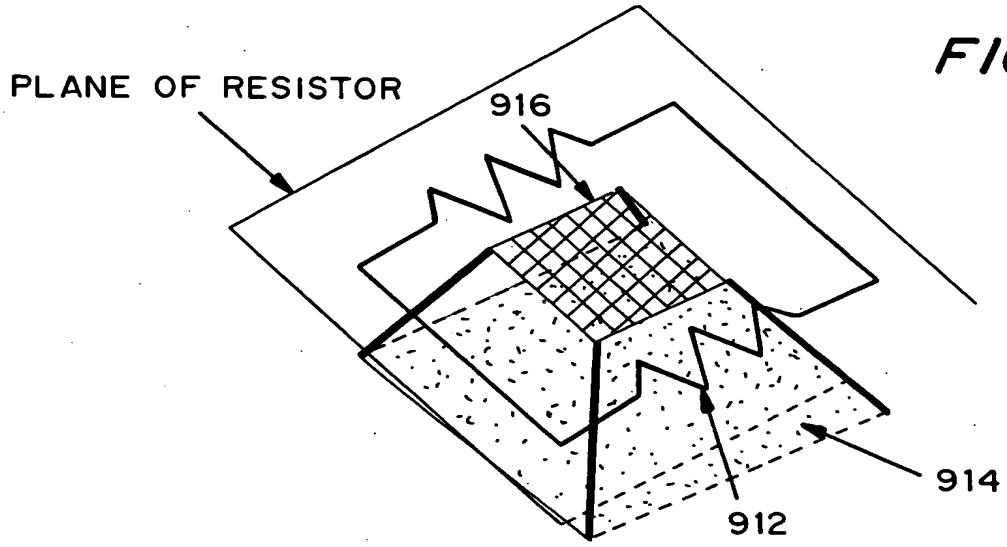


FIG. 9B

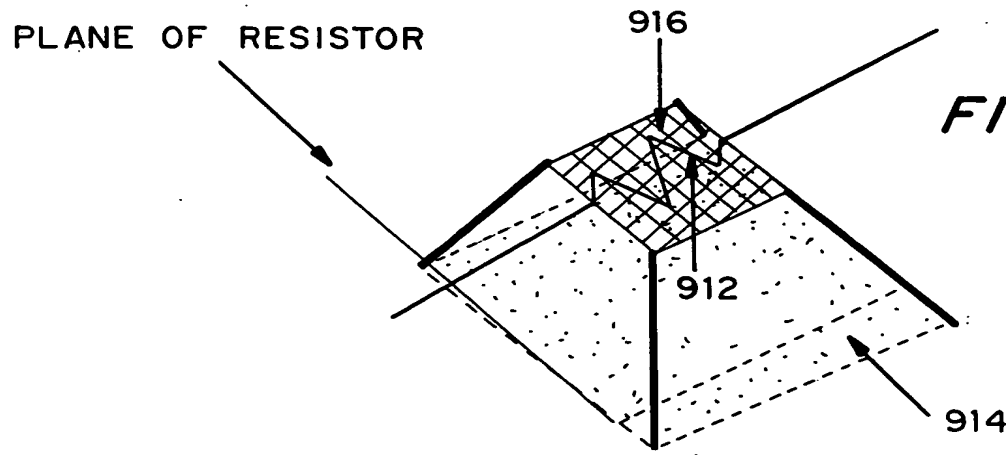


FIG. 9C

T1 < T2 < T3

FIG. 10A

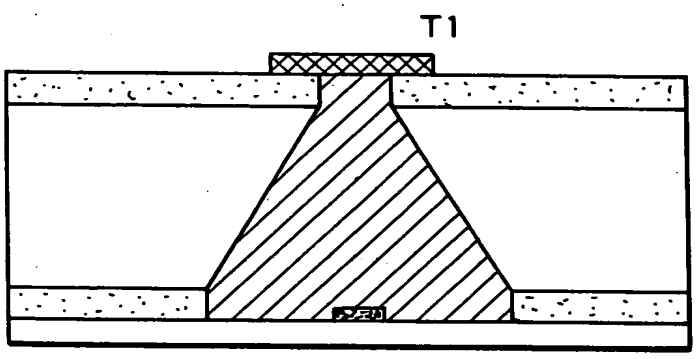


FIG. 10B

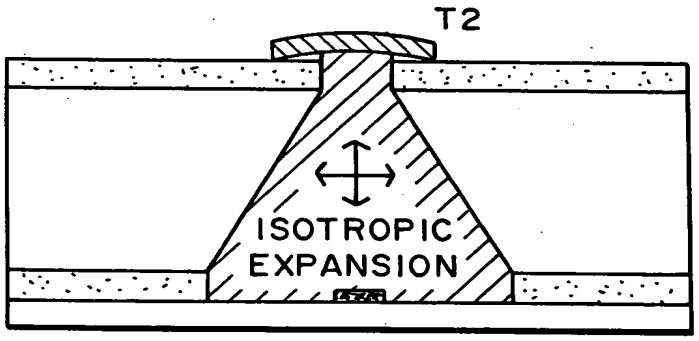
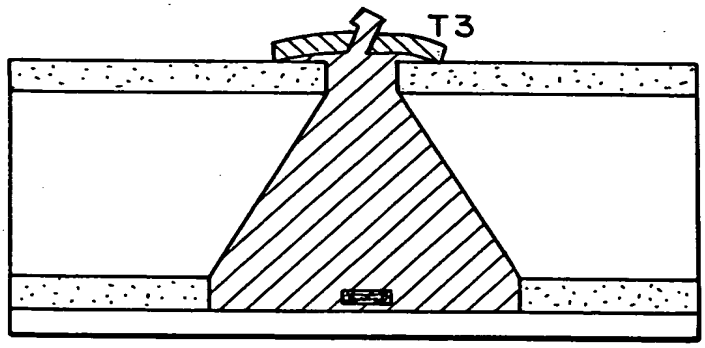


FIG. 10C



INSULATOR / ETCH MASK MATERIAL
CAP MATERIAL
RESISTOR
RELEASE SYSTEM

T1 < T2 < T3
P1 < P2 < P3

FIG. 11A

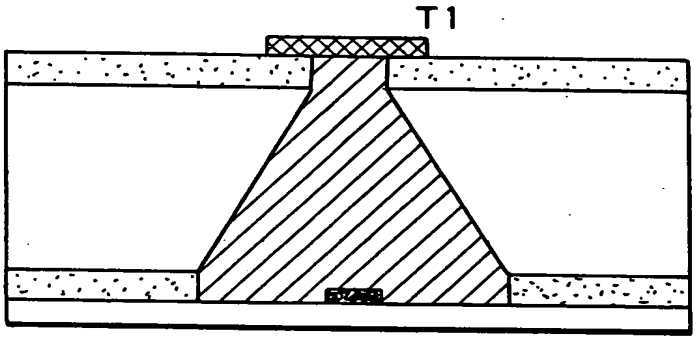


FIG. 11B

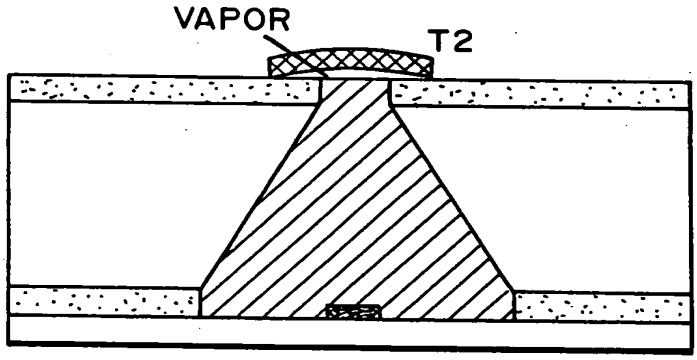
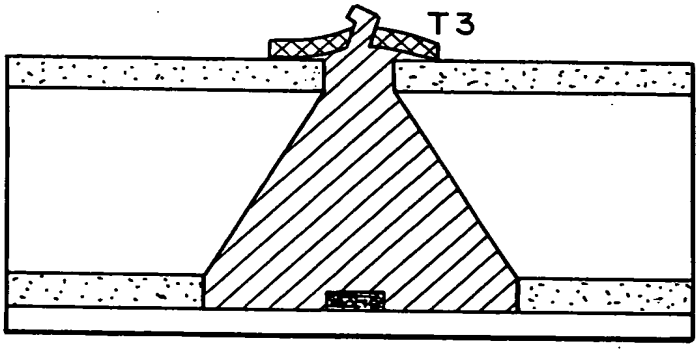


FIG. 11C

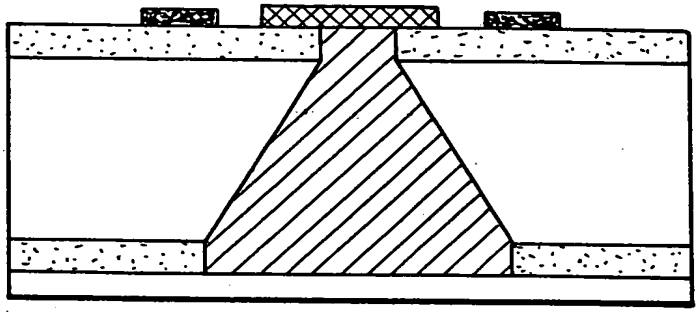


INSULATOR/ETCH MASK MATERIAL
CAP MATERIAL
RESISTOR
RELEASE SYSTEM

T1<T2<T3

T1

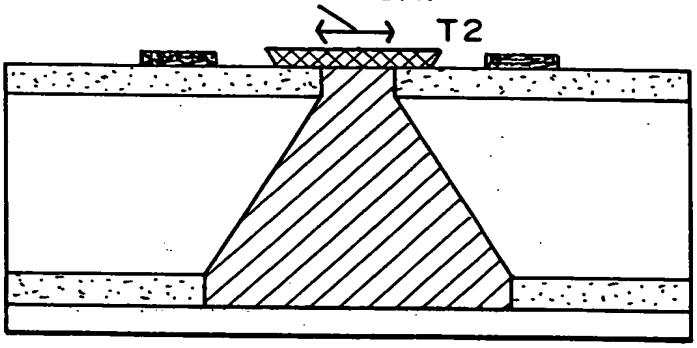
FIG. 12A



DIRECTION OF FORCES ON CAP

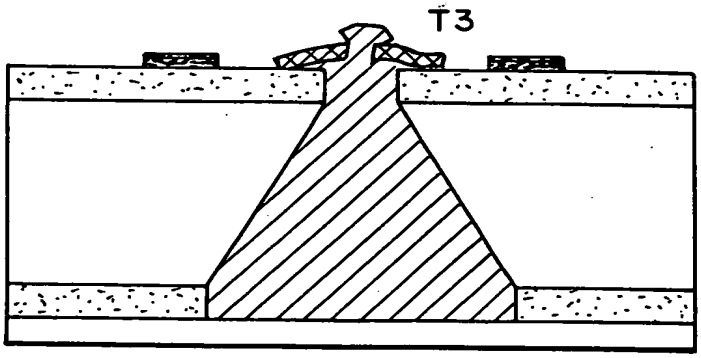
T2

FIG. 12B



T3

FIG. 12C



INSULATOR/ETCH MASK MATERIAL

CAP MATERIAL

RESISTOR

RELEASE SYSTEM

T1 < TMELT < T2

FIG. 13A

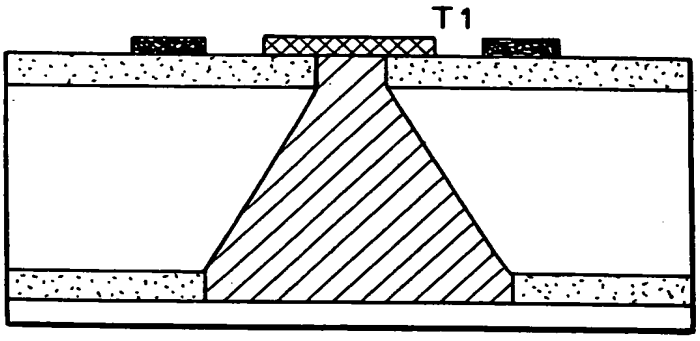


FIG. 13B

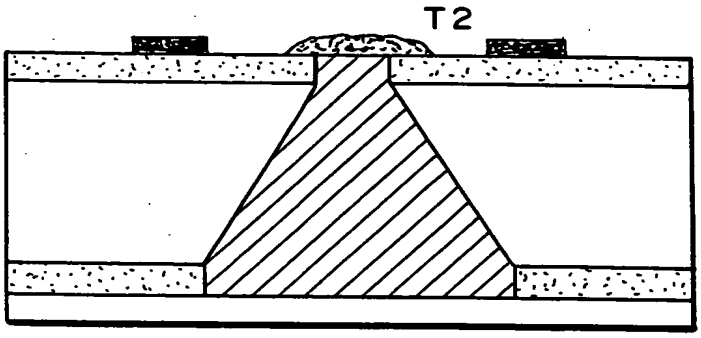
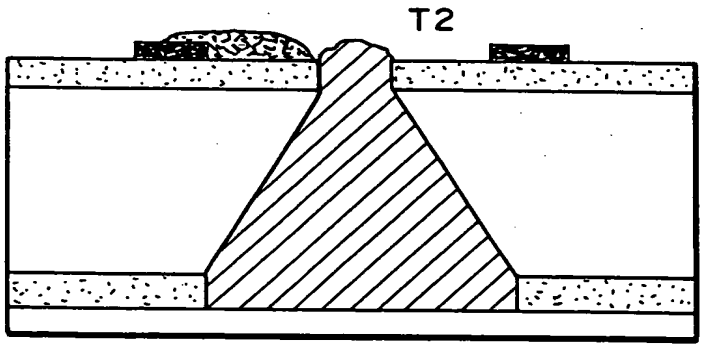


FIG. 13C



INSULATOR / ETCH MASK MATERIAL
CAP MATERIAL
RESISTOR
RELEASE SYSTEM
MOLTEN CAP